

radioSHARK
manual

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SETUP AND INSTALLATION

Thanks for purchasing radioSHARK. radioSHARK is a very powerful software/hardware combination, and we encourage you to read through the manual completely.

To begin, run the **radioSHARK application** installer on the included CD. Then plug in your radioSHARK to any available USB port on your computer and launch the radioSHARK application.

Your computer should recognize the radioSHARK hardware and the radioSHARK application should now be playing static.

Tune to your favorite radio station and off you go. If you *don't* hear anything, check that your radioSHARK is plugged in properly, quit and relaunch the radioSHARK application. If that doesn't work, you may want to read through our **TROUBLESHOOTING** guide [pg. 28]

BASIC RADIO PLAY

The main radioSHARK window contains the following:

TUNING

To tune radioSHARK, drag the **Tuning Slider** to the station you want to hear.

VOLUME

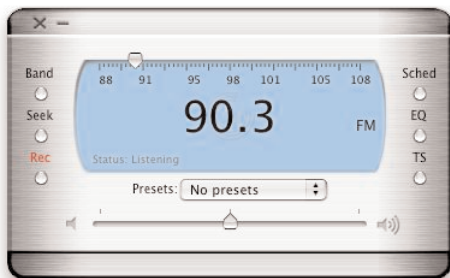
Volume is controlled by the slider at the bottom of the window. To mute the volume, click the speaker icon to the left of the Volume slider.

BAND

This button switches between AM and FM. Your choice will be confirmed in the right hand portion of the window.

SEEK

Selecting this button will make radioSHARK jump to the next strongest station.



REC

The **Record** button. Pressing this will start and stop recording. Please refer to **BASIC RECORDING** [pg 8].

PRESETS

When you find a station you like, go to the **Presets** pull down menu and **select** Add **Preset**. You'll be prompted to give it a name.

SCHED

This opens the **Scheduling** window. Here you can schedule new recordings and access previous recordings. In the Mac version you can also do a recording search here.

EQ

radioSHARK has an excellent equalization section, which can be accessed by the **EQ** button (an **EQ** confirmation will appear in the main **radioSHARK** window). There you can choose among preset **EQ** settings by checking the **On** box and selecting from the pull down **Presets** menu. If you wish to create your own, simply adjust the sliders, then save and name those settings by selecting **Add Preset** from the pull down **menu**.

TS

Time Shift. This will open the Time Shift drawer, and we'll explain its functions more fully in **TIME SHIFT RECORDING** [pg 14].

BASIC RECORDING

radioSHARK is capable of several types of recording – Instant (or Basic), Scheduled, and Time Shift recording.

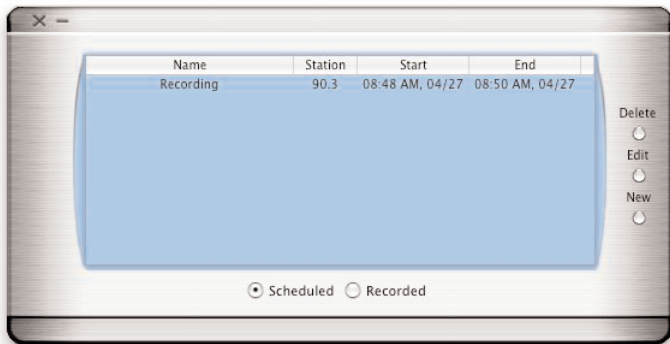
INSTANT RECORDING

Instant Recording allows you to immediately record a live radio broadcast. To start an Instant Recording, click the **Rec** button. You'll get four confirmations of recording status:

- The radioSHARK LED will turn from **blue** to **red**
- The **Rec** button will turn **red**
- **REC** (in **red**) will appear in the window
- **Status: Recording in progress** will appear in the window.
- Hit **Rec** again to stop recording.

SCHEDULED RECORDING

One of radioSHARK's best features is its ability to schedule recordings. You can schedule AM and FM recordings, set how many additional times you want a program recorded, and what type of file you want the recording saved as.



In the Scheduling window, select **New**, (Mac) or **Add** (Windows) and you'll get the **Event Details** window (Mac) or **Event Information** (Windows). This is where you select the radio sta-

tion and recording times, number of recording repetitions, name, and file format. Once you've scheduled a recording, you can delete it by clicking on the file and selecting **Delete** (Mac) or **Remove** (Windows). Selecting the **Edit** button will return you to the **Event Details** window.

SCHEDULING RECORDINGS

- 1 Select **Sched** (Schedule) in the main window and **Scheduled** in the window that appears.
- 2 Click on **New** (Mac) or **Add** (Windows)
- 3 Follow the **EVENT** instructions for Mac [pg. 11] or PC [pg. 12]
- 4 Recording will be confirmed by:
 - The **radioSHARK** LED will turn from **blue** to **red**
 - The **Rec** button will turn **red**
 - **REC** (in **red**) will appear in the window
 - **Status: Event** (**recording name**) in progress will appear at the bottom of the main window

EVENT DETAILS WINDOW - MAC

- 1 In the **Date** box, select the **Start** and **End** time – **Hour, Minute, Month, Day, Year.**
 - 2 Set how often you want the recording repeated – **None, Hourly, Daily, or Weekly.**
 - 3 In the **Details** box, give the recording a name
 - 4 Select the **Station.**
radioSHARK will automatically switch between AM and FM stations, once you've scheduled them.
 - 5 Select the type of audio file format. For more information, see **REFERENCE: AUDIO FORMATS** [pg. 29].
 - 6 Confirm the scheduled event by pressing **Ok.**
- Repeat steps 1- 6 for each Event.



EVENT INFORMATION WINDOW - WINDOWS

- 1 Give the recording a name in the **Name** field.
- 2 Select the recording date on the calendar.

Event Information

Name:

When

April, 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sa
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Time: : ☐ AM ☒ PM

Repeat:

Duration:

Radio Station

Preset:

Band: ☐ AM ☒ FM

Frequency:

Processing

☒ Record Event

Format:

Location:

☐ Broadcast over network ☐ Mute Audio

OK Cancel

- 3 Select the start **Time** – hours, minutes, **AM** or **PM**. Though the minutes pull down column is in increments of 5 minutes, you can type in any number you wish.
- 4 Select the number of times to **Repeat** – **Non-Recurring, Daily, Weekly, Monthly**.
- 5 Select the **Duration** time – again, you can input any number or use the default pull down menu.
- 6 Choose the **Radio Station** - You can choose among your **Presets**, or type in the station's radio **Frequency**. Select **AM** or **FM Band**.
- 7 Under **Processing**, confirm the **Record Event** checkbox is checked. Choose the type of audio format for the recording file under **Format** (currently, only WAV is available). Select **New Format** and in the **Custom Format** window that appears, select **OK**, and choose the file **Location**. To silence the audio playback as it's recording, check **Mute Audio**. For more information about formats, refer to **REFERENCE: AUDIO FORMATS** [pg. 29].

TIME SHIFT RECORDING

This requires some explanation, since we're violating the laws of physics and allowing you to go back in time.

THE BASIC CONCEPT

radioSHARK is a wonderful desktop radio. You turn it on, and hear your favorite song. But what if the song is almost over? Wouldn't it be great if you could **rewind** and go back to the song's beginning? What if it's the Big Game and you want to take a bathroom break and come back to the spot where you paused the action? You can with radioSHARK.

THE BUFFER

The key to the radioSHARK magic is the buffer. The buffer is the temporary storage location – actually a section of your hard drive – that radioSHARK sets aside for recording in the background. If you've enabled **Time Shift** (it's **off** by default), whatever station you select will be recorded transparently in the background. Whether you're listening or not, radioSHARK will be.

You can set the **Buffer length** (30 minutes is the default) in **Preferences**. This is the amount of time radioSHARK will record

in the background while the program is on. When you decide to record or listen to a program, the Buffer length will be the amount of time you can go back in that program. Next to Buffer Length is how much hard drive space that buffer length corresponds to (30 minutes = 302 MB, etc.). Changing the Buffer Length will result in a change in the hard drive space field.

radioSHARK employs a *circular* buffer. When you set **Buffer Length** to 30 minutes, for example, radioSHARK records for 30 minutes, loops back, and continues recording from the beginning of the Buffer. If you were to take a 35 minute break and return, the Buffer would have recorded over the first 5 minutes of the previous 30 minute section.

If you're going to do any Time Shift Recording – even something as small as a Pause for a bathroom break - you should always know the amount of time you've allotted to the Buffer and where you are in that Buffer Length (shown in the Time Shift drawer slider in the Mac version). Regardless of how long you set the Buffer Length, you can't Pause radioSHARK longer than the amount of time you have left in the Buffer.

To configure Time Shift Recording, set the following Preferences:

Go to **radioSHARK Preferences** (Windows) or **radioSHARK Preferences > Audio** (Mac).

Use Time Shift - This turns Time Shift Recording **ON**.

Accumulates when closed (Mac only) - When this is checked (and **Time Shift** is **ON**), the recording Buffer will continue to record after you've quit the radioSHARK program. When you open the program again, the Time Shift Buffer will contain recorded material you can access immediately.

Rew/Forward skips (Mac only) - Here you set the time increments for the **Rew/Forward buttons** in the **TS** window (default

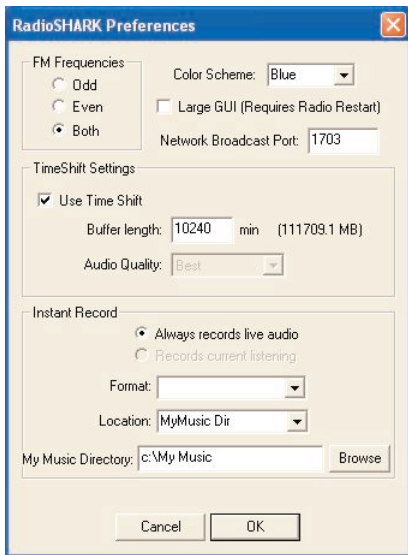


is 10 seconds). Each press of **Rewind** or **Fast Forward** will move you **back/ahead** that amount of time.

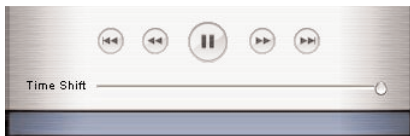
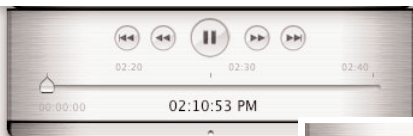
Instant record - Records current listening. This will record what you are hearing. If **Time Shift** is **ON**, and you want to hear the

beginning of a song you missed, you scroll back in the **Time Shift** drawer until that point and hit Record. If you've selected **Records current listening** you will record from that point.

Always records live radio – No matter where you select on the Time Shift Slider, radioSHARK will record live radio.



USING THE TIME SHIFT DRAWER



The Time Shift drawer drops down from the Main window, and it's where you manipulate the **Time Shift Recording Buffer**. To make the drawer visible, select **TS** in the Main window. Make sure **Time Shift** is **ON** by checking **Use Time Shift** under **Preferences>Audio** (Mac) or **Preferences** (Windows). The slider at the bottom allows you to move through the time shift buffer (the amount of time you selected earlier in Preferences). So if you're listening to live radio and you miss the beginning of a song, you can adjust the slider back a few minutes and record.

(Mac version) There is a clock at the bottom of this window, showing you the beginning point of Time Shift Recording (beginning of the Buffer), and a Timeline that shows you points along the time of the recording (its place in the Buffer). For

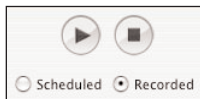
example, if you selected 30 mins. as the Buffer length and started the radioSHARK software at 1:00 PM, the Timeline would show you something like 10 minute increments along the top of the line (1:10, 1:20, etc.) and the Buffer Length underneath the Timeline (00:30:00).

In the Mac version, you can hear audio as you move the slider forward and back. This is known as “audio scrubbing,” and it’s a very useful feature to help you find your place in a recording. Try it and you’ll understand its functionality much better.

PLAYBACK OF RECORDINGS

When you've successfully scheduled and completed a recording, the next step is Playback or Editing of that recording. There's also an **Add** button which allows you to add recordings stored somewhere else on your computer (Mac only).

Your recording will be stored at **Sched>Recorded**. To name it, double click on the file under **Name** (Mac) or **Event** (Windows). To delete it select **Remove**. A prompt will appear to confirm.



Click **PLAY** to play a recording. You'll hear the recording and you'll see **PLAY** in the main window display.

Click the **STOP** button to stop playback. The display will switch back to the selected radio frequency.

If you selected **Add finished recordings to iTunes** in **Preferences>General** (Mac only), your recording will also appear in iTunes in the radioSHARK playlist.

FILE MANAGEMENT

MACINTOSH

In **Preferences>General**, you have the option **Add finished recordings to iTunes**. Checking that will automatically file your finished recordings in the radioSHARK folder in iTunes. If you didn't check that option, or if you want to access your recordings for other programs, you can find them in **Users>Your User Name>Music>radioSHARK**.

In the **Sched>Recorded** window, you can add other recordings to the window by selecting **Add** and choosing the **recording location**.

WINDOWS

In radioSHARK **Preferences** you can choose a directory location for your finished recordings in the **Location** field. You can also select the location for your Music Directory folder in the **My Music Directory** field.

RADIOSHARK PREFERENCES

MAC PREFERENCES - GENERAL

Appearance – Blue, Red, Silver, Black, Turquoise, Pink

Use frequencies – select the frequencies used in your area. For example, the United States uses odd numbered frequencies.

Seek sensitivity – how strong the radio signal must be for the Seek function. **Low** will give you the most choices; **High** will yield the fewest, but strongest, stations.

Time style – standard 12 hour or international 24 hour clock

Sort station presets by frequency – this arranges presets in the Presets window by frequency



Launch when radioSHARK is connected – launches the software when the hardware is connected.

Add finished recordings to iTunes –this automatically stores your recordings in a **radioSHARK** folder (or whatever you choose in Playlist name) in iTunes. If you sync an iPod to iTunes, it will then transfer your recordings to the iPod.

MAC PREFERENCES - AUDIO [see image pg. 16]

Use Time Shift – enables the recording Buffer.

Buffer length – sets the maximum amount of time the Buffer will record in its *circular* buffer. When you set Buffer Length to 30 minutes, for example, the Buffer records for 30 minutes, loops back to the beginning and continues recording. If you now take a 35 minute break, when you return the Buffer will have recorded over the first 5 minutes of the previous 30 minute section.

Accumulates when closed (Mac version only) - when this is checked (and **Time Shift** is **ON**), the recording Buffer will continue to record after you've quit the radioSHARK program. When you open the program again, the Time Shift Buffer will contain recorded material you can access immediately.

Rew/Forward skips – here you can set the time increments for the **Rew/Forward** buttons in the **TS** window (default is 10 secs.). Each button press will move you that amount of time.

INSTANT RECORD

Always records live radio – whether **Time Shift** is **ON** or **OFF**, radioSHARK will ALWAYS record what's on the radio in real time, and it will NOT record from the Buffer. If **Time Shift** is **ON**, you can scroll back and *listen* from any point along the Buffer, but radioSHARK will only *record* live radio.

Records current listening – when **Time Shift** is **ON**, radioSHARK will record from the point you've selected in the Buffer. This will allow you to scroll back in the Time Shift window and record the song (game, talk show) you missed. If **Time Shift** is **OFF**, checking this preference will yield the same result as **Always records live radio**.

In format: AAC and AIFF. For more information, please refer to **REFERENCE: AUDIO FORMATS** [pg. 29].

Music directory/Change – this shows the location of your recordings and allows you to change that location.

WINDOWS PREFERENCES

FM Frequencies – select the frequencies used in your area. For example, the United States uses odd numbered frequencies.

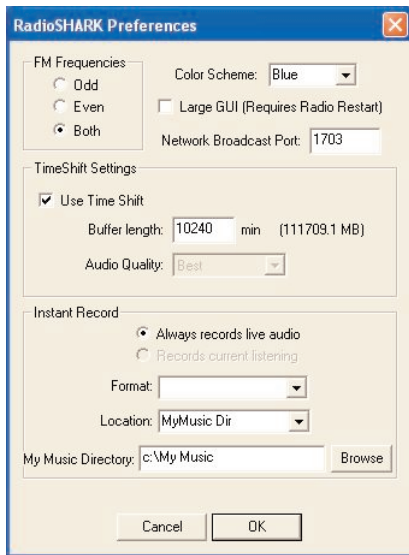
Color Scheme - Blue, Red, Silver, Black, Turquoise, Pink, Turquoise

Large GUI – enlarges the application windows

Network Broadcast Port

– To use the broadcast feature, simply select a port to broadcast on and enable broadcast (check **Broadcast over network** in the **Event Information** window) when setting up your event.

To receive the broadcast requires **Windows Media**



Player. Start **Windows Media Player** and, from the File menu, select **Open URL...** The URL will be your IP address or domain name, and the port that radioSHARK is broadcasting on. For instance, if your computer's IP address is 192.168.0.201, and radioSHARK is setup to broadcast on port 1703 (the default), the URL would be `http://192.168.0.201:1703`. A domain name may be substituted for the IP address. Note that this IP address and port must be visible to the computer connecting, so firewalls or routers may have be configured.

TIMESHIFT SETTINGS

Use Time Shift – enables the recording Buffer.

Buffer length – sets the maximum amount of time the Buffer will record before starting over. radioSHARK employs a **circular** buffer. If you set Buffer Length to 30 minutes, the Buffer records for 30 minutes, loops back to the beginning and continues recording. If you now take a 35 minute break, when you return the Buffer will have recorded over the first 5 minutes of the previous 30 minute section.

Audio Quality – Good, Better, Best. Selects the quality of the finished recording.

INSTANT RECORD

Always records live radio – whether **Time Shift** is **ON** or **OFF**, radioSHARK will ALWAYS record what's on the radio in real time, and it will NOT record from the Buffer. If **Time Shift** is **ON**, you can scroll back and *listen* from any point along the Buffer, but radioSHARK will only *record* live radio.

Records current listening – when **Time Shift** is **ON**, radioSHARK will record from the point you've selected in the Buffer. This will allow you to scroll back in the Time Shift window and record the song (game, talk show) you missed. If **Time Shift** is **OFF**, checking this preference will yield the same result as **Always records live radio**.

Format – Select the type of audio format for the recording. For more information, refer to **REFERENCE: AUDIO FORMATS**.

Location – Choose a directory location for your finished recordings to be placed in.

My Music Directory – Choose the location for your Music Directory for radioSHARK

TROUBLESHOOTING

I installed the radioSHARK software, plugged my radioSHARK into my USB port, and launched the application, but I don't hear anything. No static, no radio, nothing. What do I do?

MACINTOSH

Go to **System Preferences>Sound**

Under **Input**, select **radioSHARK USB**

Under **Output**, confirm you've selected the correct output for your computer.

WINDOWS

Go to **Start>Control Panel>Sounds and Audio Devices>Audio>Sound Recording**

Under **Sound Recording**, select radioSHARK

Under **Sound Playback**, confirm you've selected the correct output for your computer.

REFERENCE

AUDIO FORMATS

Though there are many audio formats, for simplicity and compatibility we chose AIFF and AAC for Macintosh computers, and WAV for Windows machines. AIFF and WAV are uncompressed audio formats, and they will yield the best recordings. They will also take up the most space on your hard drive. In AAC, the original audio is compressed to take up less hard drive space. Unless you're a audiophile, you probably won't notice the sound difference in an AAC file, but you'll absolutely notice the difference in the space required on your hard drive – an AAC file can be 7-10 times smaller than an AIFF or WAV file. If you're recording AM radio, or a talk show on either AM or FM, AAC is probably the best solution.

If you decide to save your program as AIFF or WAV, you need only select it. If you select **AAC**, you're presented a **Settings** button. In general, for Talk radio you can use **Good** and 128 kbits/second. Music requires **Better** or **Best**, and at least 128 or 192 kbits/second. Though you won't hurt anything by playing around with these settings, you can eat up a lot of hard drive

space recording an AM talk show at something like **Best** and **320** kbits/second. On either a Mac or a PC, what works best will depend on the material you're recording and your personal taste. Feel free to experiment with the settings to achieve the best compromise of sound and storage space.

MAC KEYBOARD SHORTCUTS:

space (time shifting on or play a file) - pause/unpause.

space (time shifting off and not playing) - mute.

right arrow - fast forward in time shift (or skip if that's set).

left arrow - rewind in time shift (or skip).

cmd-right arrow - go to "live" radio.

cmd-left arrow - go to earliest time in the time shift buffer.

arrow up - volume up.

arrow down - volume down.

> - frequency up (shift isn't required).

< - frequency down (shift isn't required).

tab - next preset.

WINDOWS SHORTCUTS

Space : Mute

F9 : Pause (affects timeshift as well as playback)

ESC : Close

Up Arrow : Volume Up

Dn Arrow : Volume Down

Left Arrow : Previous Preset

Right Arrow : Next Preset

Ctrl-Left Arrow : Search Left for Station

Ctrl-Right Arrow : Search Right for Station

TECHNICAL SPECS

REQUIREMENTS

Mac

- Mac OS 10.2.7 or higher
- G4 recommended
- USB port

Windows

- Win 2000 or higher
- 400MHz or higher recommended
- USB port

BOX CONTAINS

- radioSHARK AM-FM Desktop Radio
- CD-Rom & Manual

RADIO FEATURES

Tuner Frequency Range –

- FM: 87.5 - 107.9 MHz,
- AM: 530 - 1710 kHz
- Built-in AM/FM Antenna
- Tuning Display – Software based

RECORDING FEATURES

- Record Level Control - Automatic
- Up to 44.1k Recording (CD Quality)
- 3 presets and custom settings available

GRIFFIN CONTACT INFO

Griffin Technology
www.griffintechnology.com

Griffin Technology Support:
web: **www.griffintechnology.com/support**
email: **support@griffintechnology.com**
phone: **615-399-7000**

